

**Water Use Advisory Council (WUAC) Meeting**  
**Tuesday, October 20, 2020**  
**1:00 p.m.-4:00 p.m.**  
**On Teams Hosted by the Department of Environment, Great Lakes, and Energy (EGLE)**

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Conference ID: 477 836 550#

## **MINUTES**

### **1. Welcome**

Laura Campbell, Co-Chair, Farm Bureau, welcomed members and guests and shared the logistics for participation in the meeting. She noted she will be sharing the Chair role with fellow Chairs Eggers and Burroughs who will also facilitate portions of the agenda. She then took roll call attendance of members, asking them to share their location, and their alternates.

### **2. Roll Call**

Abbey Eaton, Department of Agriculture and Rural Development (MDARD)  
Brian Eggers, AKT Peerless –Traverse City, MI  
Bryan Burroughs—DeWitt, MI /Taylor Ridderbusch, Michigan Trout Unlimited  
Buddy Sebastian—Springport, MI/Mike Frederick, Michigan Groundwater Association  
Christine Alexander, Department of Environment, Great Lakes, and Energy (EGLE) –  
Okemos, MI  
Dave Hamilton, The Nature Conservancy Retired --Haslett, MI  
Doug Needham, Michigan Aggregates Association –Okemos, MI  
Frank Ettawageshik, United Tribes of Michigan --Harbor Springs, MI  
James Clift, Deputy Director, EGLE –Lansing, MI  
Jason Walther—Three Rivers, MI/Kelly Turner, Agricultural Irrigators  
John Yellich, Michigan Geological Survey—Kalamazoo, MI  
Laura Campbell, Michigan Farm Bureau—East Lansing, MI  
Margaret Bettenhausen, Attorney General –East Lansing, MI  
Mike Gallagher, Michigan Lake Stewardship Associations –Richland, MI  
Pat Staskiewicz—Grand Haven, MI/Clyde Dugan, Michigan Section American Water  
Works Association  
Scott DeBoe—Standish, MI/Rachel Proctor, Jackson Consumers Energy  
Steve Kohler, Kalamazoo River Watershed Council –Kalamazoo, MI  
Tom Frazier, Michigan Townships Association—Haslett, MI  
Tom Zimnicki, Michigan Environmental Council—Lansing, MI

**WUAC Members/Alternates Absent:**

Ben Tirrell Michigan Farm Bureau  
Charlie Scott, Michigan Golf Course Owners Association  
Grenetta Thomassey, Tip of the Mitt Watershed Council  
Jason Geer, Michigan Chamber of Commerce  
Jim Johnson, Department of Agriculture and Rural Development (MDARD)  
Jim Nicholas, Nicholas-H2O  
Kyle Rorah, Ducks Unlimited  
Nikki Ghorpade, Ducks Unlimited  
Rich Bowman, The Nature Conservancy  
Sue Hanf, Michigan Aggregates Association  
Tammy Newcomb, Michigan Department of Natural Resources (MDNR)

**Non-members present:**

Andy LeBaron, EGLE  
Bob Ottwell, FLOW  
Christine Spitzley, OHM Advisors  
Christopher Gothberg, EGLE  
Dave Grecio  
Dave Lusch, MSU Retired  
Dave Ostrowski  
Emily Finnell, Office of the Great Lakes  
Grant Poole  
Hannah Arnett, EGLE  
James Ostrowski, EGLE  
Jim Milne, EGLE  
Joel Henry  
Mark Seamon  
Mike Gallagher  
Nathaniel Shuff, EGLE  
Ralph Haefner, USGS  
Kristen Polly  
Victoria Velting

**3. Approval of Agenda-Roll Call Vote**

Campbell called for the approval of the agenda noting there is a repetition of items 6 and 8 therefore item number 6 will be skipped and addressed under 8. Hearing no other changes, the agenda stood as presented.

**4. Approval of Minutes-Roll Call Vote**

Campbell called for approval for minutes for September meeting. With no objections or comments the minutes were approved as presented.

**5. Public Comment**

There was no public comment at this time.

**6. Process and Timeline for Completing 2020 Legislative Report**

Deferred to item 8.

*(At this time, Co-Chair Brian Eggers assumed role of meeting Chair.)*

## **7. Recommendations Selected for Further Discussion**

- **Review of Michigan Hydrologic Framework (which now incorporates language on the previously presented metamodeling recommendation), pages 12-15**

Hamilton provided an overview of the following recommendations for the Michigan Hydrologic Framework:

- a. Glacial geology expertise is important in collecting and interpreting geologic data in Michigan. This expertise will be included in developing the MHF.
- b. Metamodeling will be evaluated as a possible way to incorporate information from calibrated models to the screening tool as part of the MHF development.
- c. Total project: \$2,100,000 (\$900,000 year 1, \$700,000 year 2, and \$500,000 year 3).

Discussion regarding approval took place. Campbell received confirmation that the metamodeling evaluation will return to the WUAC for discussion. There was a request for clear guidance going forward whether this is for reference or regulation. Hamilton noted this is just a framework without any kind of regulatory authority without going through legislature.

Needham asked for clarification on the approval citing there is only a page and a half of information for a \$2.1 million concept. Campbell noted there is an 18-page full scope write up from Hamilton which provides further detail to the page and half synopsis in the report. Burroughs pointed out second reading efforts were made and the group needs to clearly approve the recommendation and note objections/concerns.

Milne asked Sebastian if moving forward the Michigan Ground Water Association (MGWA) had representation on Models Committee for framework development would that address his concern. Sebastian agreed if we are moving forward with an eye to continually refining the tool.

The request for a glacial geologist to be present moving forward was recognized. Discussion took place regarding the definitions of valid data specifically what constitutes valid data. After additional discussion, the question was called and approved with agreement from Sebastian and Yellich to move forward.

*Recommendation confirmed by consensus.*

- **Monitoring Well Network, pages 17-19**

Haefner shared the recommendation for implementing a Monitoring Well Network is to add 10 wells annually until an optimum number of two wells per county or 160-170 wells is reached. The request includes costs for operations and maintenance. Discussion took place regarding the need for quality assurance when involving the public in obtaining data. No specific recommendations to do this are in this proposal.

Budget numbers stayed the same. Homeowners could measure well depths, but county health departments are not in favor of this methodology because of contamination

issues. Only nondrinking water wells used for measuring. Final piece is to join the National Groundwater Network.

*Recommendation confirmed by consensus.*

- **Compiling Key Aquifer Properties for use in the Water Withdrawal Assessment Tool, pages 21-23**

Lusch shared the results of additional discussion to provide better estimates of aquifer properties (storage coefficient and transmissivity). Steps were added to evaluate what the impacts of changing these parameters would be on streamflow depletion associated with existing registered users. This proposed implementation strategy will be \$110,000 across 2 years.

4 components

1. EGLE will make available Aquifer test data and make available to contractors
2. Contractor will have \$15,000 statewide estimate of transmissivity of bedrock and glacial aquifers.
3. EGLE will have \$10,000 allocated to do assessment of what the impacts of these changes are to Water Management Areas (WMA) that had changed aquifer storage coefficients and will report to council. Also propose implementation strategy for changes to the aquifer storage coefficients.  
Council will approve any changes to WWAT tool.
4. \$85,000 for CSS at DTMB for software changes to the tool but not until implementation plan is approved by the WUAC.

*Recommendation confirmed by consensus.*

- **3D Glacial Aquifer Mapping in Two Counties, pages 23-24**

Lusch said this recommendation was also given back for additional discussion and has changed. The revised recommendation is to do only two only 2 counties, Cass, and Calhoun versus the 4 counties as originally proposed. Details of the recommendation and request:

- 3D glacial aquifer data, currently unavailable in most of Michigan, would greatly help EGLE staff, as well as private contractors, to predict whether proposed Large Quantity Withdrawals are likely to cause Adverse Resource Impacts by using groundwater flow modelling.
- One of most robust methods of mapping the 3D aquifer properties of an area is the transition probability/Markov (TP) geostatistical approach to produce a 3D Lego block-like geologic model of aquifer material types.
- The WUAC recommends that the legislature allocates \$80,000 to the EGLE Water Use Program to be expended across two fiscal years by an external contractor who will map the 3D aquifer properties of Cass and Calhoun counties using the TP geostatistical approach.
- The contractor shall propose and conduct one or more statistical comparisons of the TP-derived geologic model with a subjectively derived geologic model for each county and present their findings to WUAC Models Committee.

*Recommendation confirmed by consensus.*

- **Water Conservation Recommendations**

Turner shared two recommendations the first was –**Advance Michigan’s Water Conservation and Efficiency Efforts through State Climate, Energy, and Water Infrastructure Initiatives**

Synopsis:

- MI Healthy Climate Plan introduction  
Making MI fully carbon-neutral by 2050
- Investment in MI’s aging water infrastructure
- New Technological Advancements

Identify gaps and opportunities to strategically integrate water conservation and efficiency into current and future climate, energy and water infrastructure policies and programs.

Develop knowledge of best practices and cutting-edge technological innovations for water conservation and efficiency for different water user (residential, agricultural, commercial, institutional, and industrial user groups).

Identify programs to promote education, outreach, and technical assistance to different user sectors (residential, agricultural, commercial, institutional, and industrial user sectors).

Recommendations:

Form a WUAC Subcommittee to champion the strategic integration of water conservation and efficiency into Michigan’s existing and new policies and programs through the following actions.

- Conduct an assessment of the state of Michigan’s current climate, energy, sustainability and water infrastructure policies and programs to identify current and future opportunities where water conservation and efficiency efforts may be incorporated.
- Identify gaps and opportunities to strategically integrate water conservation and efficiency into future policies and programs.
- Identify technological advancements to incorporate into water conservation and efficiency practices.
- Assess the EPA Watersense Program and other water rich state water conservation and efficiency programs including education and outreach initiatives targeting major water sectors (for example: the Minnesota Water Conservation Program).
- Identify specific innovative opportunities to improve Michigan’s Water Conservation and Efficiency Program by building connections between current and new policies and programs, technological innovations, and promote education and outreach to different user sectors.

Cost and Funding -Two Options:

1-Approximately \$50,000 to issue a competitive funding opportunity to hire a consultant to conduct the assessment –legislative request.

2-Submit a project proposal through the University of Michigan Graham Sustainability Institute Dow Sustainability Fellows program.

Implementing Organization:

The newly created WUAC Conservation Committee, EGLE and MDARD staff to convene the stakeholder group, develop funding opportunity, and/or serve as advisors to the Dow Sustainability Fellows Masters project team to participate in the discussion.

Timeframe:

Project is estimated at approximately 12 months.

It was confirmed by consensus that a new Conservation Committee has been created and this Committee is approved to start working immediately

The \$50,000 request remains in report.

*Recommendation confirmed by consensus*

The second conservation initiative Turner shared was **Increasing Water Efficiency and Conservation Practices in the Agriculture Industry.**

Synopsis:

- Ag irrigation continues to expand
- MI Healthy Climate Plan introduction, MI fully carbon-neutral by 2050
- Increased conservation and efficiency practices may become critically important as more Water User Committee discussions take place
- Ag Irrigation GAAMPS are tools for educators to expand on efficiency and conservation practices leading to water quality benefits

Recommendation: Develop and implement a strategy with clear objectives to expand training and outreach to each Agriculture Industry sector to improve water efficiency, and where possible, provide water quality benefits. This new initiative should include a systematic approach to water efficiency and conservation education and training for both plant and animal agriculture industries that can transition to a long-term institutionalized program.

Cost and Funding

Adding two (2) additional FTE positions to the current MSUE irrigation educator team to develop and launch the initiative into a program that can be institutionalized into a long-term program over a three-year period is \$80,000-\$100,000 per position annually. This cost covers the position salary, benefits, and a small operating stipend. For FY 2021-2023 the ask is for \$200,000 annually.

Implementing Organization:

Michigan Commission of Agriculture and Rural Development, MDARD, EGLE and MSUE.

Timeframe:

A three-year timeframe is needed to develop, initiate, implement, and evaluate the program. After this initial three-year period, it is expected that the positions become institutionalized for continued success.

Dr. Younsuk Dong was hired on with MSU Biosystems & Ag Engineering prior to Steve Miller's retirement and it is understood that he will be filling Miller's role. Education and training are seen as the key to move this initiative forward through all ag sectors.

Campbell inquired if the legislature could fund a position at MSU during the current hiring freeze. Clift responded that the State of Michigan can provide the money then MSU would have to decide what to do with it. Discussion took place regarding the proven value of education and outreach and how much staff and funding is needed. Staskiewicz noted metering would be a tried and tested technology and not that expensive. It would be an option for monitoring v. education. Eaton replied it is not required and there would be significant push back. Campbell noted as a member of the GAMP committee metering for water use is a smart way to go but there will be push back to require it.

*Recommendation confirmed by consensus with notes to move forward*

***(At this time, Co-Chair Bryan Burroughs assumed role of meeting Chair.)***

**8. Process and Timeline for Completing 2020 Legislative Report**

Campbell noted there are two topics to consider the language in the introduction and the priority of recommendations. She shared the following introductory language which was included in the original 2014 report:

*A fundamental underlying reason that we address the issue of water conservation is that we love the Great Lakes and the ground water systems upon which they rely. We may ask ourselves - why do we do this work to preserve the water? ... The answer lies in the fact that unlike many other endeavors where failure may be inconvenient but otherwise has little effect on our lives, failure in this work that we are doing will have major negative impacts. If we are not able to develop the process for the shift in how our State and our communities use, conserve, protect and restore the water resources in the Great Lakes region our failure will impact our lives and the lives of our children, grandchildren and generations beyond.*

*The indigenous nations of the Great Lakes region have traditional teachings that guide them to seek balance in personal, family, community, and national life. The strengths and perils of Fire, Wind, Earth and Water and the balance among them are of fundamental importance. These teachings inform that when people disrespect this balance, our collective future is endangered. Water is the lifeblood of Mother Earth; it flows in her veins and fills her oceans, lakes, rivers, and streams. It is essential for the plants and animals with whom we share this wonderful creation. It surrounds us all in our*

*Mothers' wombs before we are born; without it, life as we know it could not exist on Earth.*

Campbell asked the group if there should be a new statement or is this statement appropriate to repeat. She also asked if it captures the need to emphasize the value of water per the Council's discussion in September. It was determined the introduction from 2014 is still relevant and consensus to keep the original introduction was reached. If people have additional suggestions, please send to Campbell.

Campbell then addressed the prioritization of recommendations. She shared the identified recommendations that are currently gathered into the following groups:

- Recommendations to Continue and Improve Current Operations and Data Collection
  - Michigan Integrated Water Management Database
  - Well Driller Trainings for Improved Data
  - U.S. Geological Survey (USGS) and EGLE streamflow gages
- Recommendations for New Operations to Improve Data Collection and Modeling
  - Michigan Hydrologic Framework
  - Geologic Data Collection and Mapping in targeted areas of Michigan
  - Monitoring Well Network
- Recommendations for Additional Activities to Improve Data Collection and Modeling as Continued and New Operations are Underway
  - Long-term planning
  - WWAT user interface update
  - Compiling Key Aquifer Properties for use in the Water Withdrawal Assessment Tool
  - 3D Glacial Aquifer Mapping in Two Counties
- New and Ongoing Activities that Do Not Need Additional State Funding
  - Develop Water User Committee (WUC) User's Manual
  - Develop standards & protocols for collection and use of new data within the program
  - Well-owner outreach on registration completion requirement

It was noted Conservation Committee recommendations will be added as an additional set when they are finalized in the coming weeks.

The WUAC will continue review and work on the Cass County water use pilot study model.

The Implementation Committee proposes that while the report should emphasize all recommendations are a priority of the Council, that the groups listed above are prioritized in order of necessity for immediate (FY 2022) funding. However, the individual recommendations within each group are not prioritized and are presented as a package. Where the new Conservation recommendations will rank when they are approved will need to be determined.



This list represents a significant amount of work by the WUAC who have narrowed down the list of over 70 recommendations from the 2014 report. Ettawageshik asked this be noted in the report. It was noted that the WUAC is only making recommendations and the final decisions for prioritization and funding will be made by the legislature. Discussion also took place regarding EGLE staffing levels and if EGLE has the people in place with adequate availability to carry out recommendations should funding be granted.

Report edits are due to Campbell by October 30. At that time changes will be incorporated by Spitzley and sent out the WUAC as soon as possible. The November WUAC meeting will be the final sign off of the draft report. The final report will be presented at the December meeting.

#### **9. Updates on Cass County Model**

Hamilton reported a Models Committee meeting was held to discuss the details of the Cass County Model. The meeting was recorded and is available. Many concerns were raised, and it was clear EGLE was not going to accept this model in its current form. He noted the data set is phenomenal and there is a lot of interest in finishing work on this to bring it to a successful completion. Nicholas and Hamilton agreed to facilitate a technical meeting which was held last week. There was very good discussion which included the funders. Plans were made to move model forward. Guidelines were developed to support a work plan to be created by Feenstra. A caveat is the funders are willing to go forward. Plan is for an iterative development of the model through fine tuning and recalibration to make sure there is agreement as it moves forward. The hope to have a calibrated model with broad agreement for use by this program down the road.

#### **10. Next Meeting**

The next meetings will be held at 1 p.m. on November 10 and December 15, 2020.

#### **11. Open Comments**

Frazier asked the group to ignore his unintentional email about the November 10 meeting.

#### **12. Motion to Adjourn**

There being no further business, it was MOVED by Ettawageshik and SUPPORTED by Yellich to adjourn the meeting. MOTION CARRIED.